

# Title of the publication

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Keyword1 | Keyword2 | Keyword3

Abbreviations: SAM, self-assembled monolayer; OTS, octadecyltrichlorosilane

## Introduction

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$$\frac{D\theta}{Dt} = \frac{\partial\theta}{\partial t} + u \cdot \nabla\theta = 0 \quad [1]$$

Referencing equation [1]. Praesent volutpat, nibh in dignissim commodo, tellus justo consequat erat, vel consequat mi arcu vel lectus. Aliquam a tellus nec felis sagittis consequat. Quisque convallis imperdiet neque a tempor. Nulla non erat urna. Mauris vel lorem magna, tristique auctor ipsum. Aliquam pharetra eleifend massa. Donec porttitor sagittis luctus. Aliquam pretium luctus leo quis congue. Morbi vel felis mi. Suspendisse viverra tortor pretium orci lacinia eleifend. Phasellus aliquam, nunc eu cursus feugiat, erat odio porttitor libero, quis accumsan orci ipsum ut lorem. Vestibulum pharetra malesuada egestas. Sed non orci sit amet erat suscipit fringilla in et diam. Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia Curae; Nunc ut rhoncus nulla. Aenean porta rhoncus suscipit.

## Results

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## Simulations.

### Simulation 1

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### Simulation 2

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## Discussion

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## Materials and Methods

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**Definition 1.** A bounded function  $\theta$  is a weak solution of  $QG$  if for any  $\phi \in C_0^\infty(\mathbb{R}/\mathbb{Z} \times \mathbb{R} \times [0, \varepsilon])$  we have

$$\int_{\mathbb{R}^+ \times \mathbb{R}/\mathbb{Z} \times \mathbb{R}} \theta(x, y, t) \partial_t \phi(x, y, t) dy dx dt + \int_{\mathbb{R}^+ \times \mathbb{R}/\mathbb{Z} \times \mathbb{R}} \theta(x, y, t) u(x, y, t) \cdot \nabla \phi(x, y, t) dy dx dt = 0 \quad [2]$$

where  $u$  is determined previously.

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**Theorem 1.** If the active scalar  $\theta$  satisfies the equation [2], then  $\varphi$  satisfies the equation

$$\begin{aligned} \frac{\partial \varphi}{\partial t}(x, t) &= \int_{\mathbb{R}/\mathbb{Z}} \frac{\frac{\partial \varphi}{\partial x}(x, t) - \frac{\partial \varphi}{\partial u}(u, t)}{[(x - u)^2 + (\varphi(x, t) - \varphi(u, t))^2]^{\frac{1}{2}}} \\ &\quad \chi(x - u, \varphi(x, t) - \varphi(u, t)) du + \\ &\quad + \int_{\mathbb{R}/\mathbb{Z}} \left[ \frac{\partial \varphi}{\partial x}(x, t) - \frac{\partial \varphi}{\partial u}(u, t) \right] \\ &\quad \eta(x - u, \varphi(x, t) - \varphi(u, t)) du + Error \quad [3] \end{aligned}$$

with  $|Error| \leq C \delta |\log \delta|$  where  $C$  depends only on  $\|\theta\|_{L^\infty}$  and  $\|\nabla \varphi\|_{L^\infty}$ .

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## Appendix

An appendix without a title.

## Appendix: Appendix title

An appendix with a title.

**ACKNOWLEDGMENTS.** This work was partially supported by a grant from the Spanish Ministry of Science and Technology.

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**Fig. 1.** Figure caption

**Table 1.** Table caption

Treatments	Response 1	Response 2
Treatment 1	0.0003262	0.562
Treatment 2	0.0015681	0.910
Treatment 3	0.0009271	0.296